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# **THE NATIONAL SHIPBUILDING RESEARCH PROGRAM**

## **Shipyard Oil and Petroleum- Related Activities Subtask 26**

U.S. DEPARTMENT OF THE NAVY  
CARDEROCK DIVISION,  
NAVAL SURFACE WARFARE CENTER

in cooperation with  
National Steel and Shipbuilding Company  
San Diego, California

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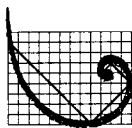
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# SHIPYARD OIL AND PETROLEUM-RELATED ACTIVITIES MANUAL

*Prepared for*

**National Shipbuilding Research Program  
Panel SP-1**

*Prepared by*



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# INTRODUCTION

### Purpose

In April 1997, National Steel & Shipbuilding Company (NASSCO) authorized ERM-West, Inc., (ERM) to identify, through research and analysis of Clean Water Act (CWA) and Oil Pollution Act of 1990 (OPA 90) regulatory requirements, the regulations that apply to oil and petroleum-related activities in shipyards. The results of that research are contained in this manual, *Shipyard Oil and Petroleum Related Activities* (SOPRA).

Shipyards conduct numerous activities involving oil and petroleum products and wastes that are subject to regulation under the CWA and OPA 90 regulations. The patchwork of Department of Transportation (DOT), Environmental Protection Agency (EPA), and United States Coast Guard (USCG) regulations is confusing in their jurisdiction and requirements. In some cases, activities must be covered under one regulation; in other cases, more than one regulation or agency applies. In others, the material or activity is exempt from regulation. The question of jurisdiction is discussed in detail in Section C.

This manual provides the results of ERM's review of requirements applicable to shipyards and provides guidance on how activities are regulated.

### Approach

ERM visited NASSCO in April 1997 to develop a list of oil and petroleum-related activities that occur in shipyards. The resulting list of activities was reviewed by other shipyards for completeness and was used as the basis for this manual. A review was subsequently made to identify the regulations under CWA and OPA 90 that apply to these activities.

As part of the applicability review, ERM contacted regulators from the EPA, USCG, and DOT. It is apparent from the review of regulations

and discussions with regulators that while the requirements of OPA 90 apply to shipyards, agency jurisdiction may be unclear. OPA 90 regulations were intended to apply to storage facilities, vehicles, pipelines, and vessels that handle oil in bulk. The regulations are clear about how these types of facilities are governed. Within shipyards, however, there are several activities that involve oil and petroleum, but they may not always be handled in bulk. As a result, it may not be clear which regulations apply.

A key concept to understand when applying the regulations is that of a bulk oil transfer, which involves a transfer of oil through pipes and hoses between a facility and a vessel. This activity does not include the transfer by crane of a container or tank containing oil between a facility and a vessel. The USCG regulates bulk oil transfers but not transfers of oil in containers.

The SOPRA manual format is divided into four sections. Those sections are:

- Introduction
- Self-assessment Checklist
- Activities/Facilities Table
- Activities/Regulations Matrices

### **Self-assessment Checklist**

Section B, Self-assessment Checklist, identifies the applicability requirements for the various regulations that apply to shipyard activities. You are directed to check the criteria that apply to your shipyard on the applicability checklists.

A brief description of each regulation and its corresponding regulatory citation is provided in this section. Specific guidance on how to comply with the regulations is not provided in the SOPRA manual. You will need to refer to the regulations for complete details on how to comply with the requirements.

### **Activities/Facilities Table**

The Activities/Facilities Table, Section C, identifies the oil and petroleum activities that occur in shipyards. The descriptions indicate

the range of activities that can take place, although most shipyards only perform a subset of these activities.

### **Activities/Regulations Matrices**

Two matrices have been developed to visually compare the activities identified in the Activities/Facilities Table to the applicable regulations from CWA and OPA 90 to more easily determine which regulation applies to a given shipyard activity or facility. One matrix has been developed for activities occurring on or over water, and the other presents activities occurring over land.

## **CWA and OPA 90**

### **Clean Water Act (CWA)**

The CWA prohibits the discharge of any quantity of oil and petroleum into surface waters. The CWA requires the preparation of a Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) by facilities that have discharged or have potential to discharge oil and petroleum in harmful quantities (e.g., a sheen). The limitation on the amount of oil discharged is important to note because even if a particular activity is not regulated, the owner or operator must still prevent spills from reaching surface waters. An owner or operator should develop or adopt Best Management Practices in these instances to prevent a discharge from reaching surface waters. Other regulations promulgated under the CWA include NPDES Storm Water Permits and Plans.

### **Oil Pollution Act of 1990 (OPA 90)**

The OPA 90 established a number of new provisions related to oil spill prevention and response. Under OPA 90, operators of oil production facilities, pipelines, oil transport vessels, marine transportation-related (MTR) facilities, and non-transportation-related facilities handling oil are required to develop spill response plans. (Note that an oil spill response plan is not an SPCC Plan, and SPCC Plans may not provide the level of detail anticipated to be required for oil spill response planning under OPA 90.) Four agencies—the Research and Special Programs Administration (RSPA) under the U.S. Department of Transportation (DOT), the U.S. Coast Guard (USCG), the U.S. Environmental Protection Agency (EPA), and the Minerals Management Service (MMS) of the U.S. Department of the Interior—

promulgated regulations that dictate the contents of oil spill response plans. Facilities and vessels must prepare plans and submit them to the agency or agencies with jurisdiction over the facilities or vessels. The oil spill response plan must be amended as changes occur and must be updated and resubmitted to the administering agency or agencies every 5 years.

More than one agency may have regulatory authority for a specific facility, especially if the facility has both transportation and non-transportation areas. Such facilities are termed “complexes” and may have to submit oil spill response plans to each agency having jurisdiction. The most common complex is one with a marine transfer facility, such as a barge dock, and non-transportation operations, such as an associated tank storage area. These facilities are regulated by both the USCG and EPA. A complex may develop a single response plan with a set of core elements for all regulating agencies and separate annexes for the non-transportation and transportation components.

OPA 90 has many requirements in addition to oil spill response plans, including financial assurance requirements for vessels and offshore and onshore facilities and provisions for Prince William Sound and the Trans-Alaska pipeline system. Provisions for Prince William Sound and the Trans-Alaska pipeline system are not addressed in this manual.

Some local requirements for oil and petroleum may vary in important ways. The evaluator should obtain copies of spill response plan requirements, where appropriate, and review them for variances with the federal model before preparing response plans.

## **Options for Compliance**

On June 5, 1996, the EPA announced the availability of the National Response Team’s (NRT) Integrated Contingency Plan Guidance. This one-plan guidance is intended to be used by facilities to prepare emergency response plans for responding to releases of oil and non-radiological hazardous substances. The intent of the NRT is to provide a mechanism for consolidating multiple plans that facilities may have prepared to comply with various regulations into one functional emergency response plan or integrated contingency plan (ICP). A number of statutes and regulations, administered by several federal agencies, include requirements for emergency response planning.

A particular facility may be subject to one or more of the following federal regulations:

- *EPA's Oil Pollution Prevention Regulation (SPCC and Facility Response Plan Requirements (40 CFR 112.7(d) and 112.20-.21);*
- MMS's Facility Response Plan Regulation (30 CFR 254);
- *RSPA's Pipeline Response Plan (49 CFR 194);*
- *USCG's Facility Response Plan (33 CFR 154 Subpart F);*
- EPA's Risk Management Programs (40 CFR 68);
- OSHA's Process Safety Standard (29 CFR 1910.119);
- OSHA's HAZWOPER (29 CFR 1910.120); and
- EPA's Resource Conservation and Recovery Act Contingency Plan Requirements (40 CFR 264 Subpart D, 40 CFR 265 Subpart D, and 40 CFR 279.52).

The regulations in italicized print are those that apply to oil and petroleum-related activities in shipyards.

Facilities may also be subject to state emergency response planning requirements that this guidance does not specifically address. Facilities are encouraged to coordinate development of their ICP with relevant state and local agencies to ensure compliance with any additional regulatory requirements.

Adherence to this guidance is not required in order to comply with federal regulatory requirements. Facilities are free to continue maintaining multiple plans to demonstrate federal regulatory compliance; however, the NRT believes that an integrated plan prepared in accordance with this guidance is a preferable alternative.

The NRT and the agencies responsible for reviewing and approving federal response plans to which the ICP option applies agree that integrated response plans prepared in the format provided in this guidance will be acceptable and be the federally preferred method of response planning.

Because individual regulations are often more detailed than the ICP guidance, to ensure full compliance, facilities should continue to read and comply with all of the federal regulations that apply to them.

The use of a single emergency response plan per facility will eliminate confusion for facility first responders who often must decide which of their plans is applicable to a particular emergency. The guidance is designed to yield a highly functional document for use in varied emergency situations while providing a mechanism for complying with multiple agency requirements. Copies of the guidance can be found at [www.epa.gov/swercepp/acc-pre.html](http://www.epa.gov/swercepp/acc-pre.html).

## **Public vs. Private Shipyards**

With one exception, there is no difference between the applicability of OPA 90 regulations with regard to public and private vessels. Public vessels are exempt from oil pollution prevention regulations for vessels (33 CFR 155) and from the USCG requirements for oil transfer operations within the same vessel (33 CFR 156). Private shipyards owning or operating private vessels must comply with both regulations. Both public and private shipyards must comply with the USCG regulations for facilities transferring oil in bulk, and with all other regulations identified in Section B.

## **Contractor Liability**

Because there are many contractors that work in shipyards, performing many different activities, it is important to identify the roles and responsibilities of those who have the responsibility for developing and maintaining plans to manage oil and petroleum-related materials.

In the case of the USCG, the shipyard has the responsibility to develop and maintain a facility response plan if they are performing the activity that is subject to regulation or if they own the equipment which the contractor is operating. If the facility owns and operates the vessels used in bulk oil transfers, they must develop a vessel response plan; however, if the contractor owns and operates the vessel, the responsibility is the contractor's.

Within the EPA, the responsibility for SPCC planning, SWPPP, and the Facility Response Plan belongs to the owner or operator of the site.

The DOT regulates pipelines, motor vehicles, and railroad cars for the transport of oil and oil mixtures into and out of a shipyard. As such, the owner or operator of the pipeline or the motor vehicles and railroad cars has the responsibility of compliance until which time they

are no longer under DOT's jurisdiction. At that point, the responsibility becomes the shipyard's.

Although not required to do so, a shipyard should, as a best management practice, confirm that contractors have the required response plans and be able to produce appropriate documentation of such.

## SECTION B

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# ***SELF-ASSESSMENT CHECKLIST***

This section is organized to assist a shipyard in determining which of the CWA and OPA 90 regulations apply to it.

### **Applicable Regulations**

The following CWA and OPA 90 regulations have been determined to apply to shipyard operations. The applicability and a brief description of each is provided in this section.

- Spill Prevention, Control, and Countermeasure Plan
- NPDES Storm Water Pollution Prevention Plan
- EPA Facility Response Plan
- Oil Spill Response Plan
- Oil Pipeline Response Plan
- USCG Requirements for Facilities Transferring Oil in Bulk
- USCG Requirements for Oil Transfer Operations
- Oil Pollution Prevention Regulations for Vessels

### **Organization**

The applicable regulations have been organized to assist you in determining their applicability to your shipyard. Under the subsection entitled "Applicability Criteria," the applicability criteria for each regulation are presented in a table with a box to be checked if any of the criteria applies. Following the applicability tables are descriptions that provide guidance and definitions on how to interpret the applicability criteria. Once applicability has been determined, a section briefly describing the regulation, entitled "Regulatory Requirements," follows. The regulatory citation is also provided to guide you to the appropriate

section of the regulation for further detail. This manual does not address the specific details of the regulatory requirements.

Keep track of the applications that apply. This will later enable you to identify which of the regulatory requirements given in the Section D matrices apply to the activities that occur in your shipyard.

## Spill Prevention, Control, and Countermeasure (SPCC) Plans - (40 CFR 112.7)

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### Applicability Criteria

A Spill Prevention, Control, and Countermeasures Plan is required of a shipyard if it has a storage capacity for oil or oil-containing liquids that meets any one of the following criteria:

	Criteria	Check All That Apply
1.	The shipyard stores oil in at least one aboveground oil container that has a capacity of 660 gallons or more.	
2.	The shipyard has a combined aboveground oil storage capacity of at least 1,320 gallons.	
3.	The shipyard has a combined underground oil storage capacity of at least 42,000 gallons.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.
- There is considerable difference in how the various EPA regions define oil-containing liquids. EPA Region 9 interprets oil-containing liquid to mean liquids containing at least 5 percent oil, but Region 3 regulates oil in any amount. In Fall 1997, the EPA plans to issue a proposed rule that will provide guidance on this issue. Currently, it appears that the oil-containing liquid must be present in a quantity of greater than 10 percent for a certain period of time to trigger SPCC requirements.
- Examples of oil-containing liquid may include bilge water, oil-based paints, and cutting fluids. Different regions may have different interpretations of what constitutes an oil-containing liquid as mentioned above. For example, Region 9 does not consider oil-based paint to be an oil-containing liquid while Region 3 considers anything, including oil-based paint, to be an oil-containing liquid.
- EPA Region 3's Outreach Manual provides guidance on facility storage capacity of oil. The facility storage capacity includes the capacity of all containers, such as tanks, transformers, drums, and 5-gallon buckets. Empty containers intended for oil but not

permanently removed from service are included. The total capacity of the container is included in the facility storage capacity, whether the container is used for oil or oil mixtures.

### **Regulatory Requirements**

Requirements under this group of regulations provide for the development and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. These plans are required for land-based facilities storing oil or oil-containing liquids above certain threshold quantities.

These plans are designed to prevent oil spills and to outline measures that will be taken in the event of a spill. SPCC Plans must be amended whenever a major change in facility design, construction, operation, or maintenance materially affects that facility's potential to discharge oil.

The SPCC Plan must be reviewed and certified by a registered Professional Engineer and must include a discussion of compliance with operating, spill prevention, and containment procedures, including:

- A prediction of the nature and extent of an oil discharge that would result from equipment failure;
- A description of structures and equipment designed to prevent discharged oil from reaching water; and
- A discussion of the facility's compliance with applicable guidelines relating to facility drainage, bulk storage, piping, loading and unloading, oil drilling, facility security, inspections, record keeping and personnel training.

The facility must inspect its SPCC Plan periodically to make sure that it has been reviewed and evaluated at least once in the last 3 years. It must be amended within 6 months, as necessary, to include more effective, field-proven control technologies if they will reduce the likelihood of a spill.

## **NPDES Storm Water Pollution Prevention Plan (40 CFR 122)**

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### **Applicability Criteria**

An NPDES Storm Water permit addresses storm water discharges associated with industrial activity. A shipyard is required to have a Storm Water Pollution Prevention Plan if it conducts ship and boat building and repair operations (i.e., SIC Code 373) and is required to be covered under any one of the following permits:

	<b>Criteria</b>	<b>Check All That Apply</b>
1.	Individual NPDES Storm Water permit	
2.	Group NPDES Storm Water permit	
3.	General NPDES Storm Water permit	
4.	Overall NPDES permit that includes storm water discharges	

- Industrial activities are defined as activities that are directly related to manufacturing, processing, or raw material storage areas at an industrial plant. The NPDES Storm Water permit covers all areas of a covered industrial plant, excluding parking lots and administrative and employee buildings. (40 CFR 122.26 (b)(14))

### **Regulatory Requirements**

Onshore facilities that discharge storm water that may have come into contact with certain materials associated with industrial activities may be required to develop and implement Storm Water Pollution Prevention Plans (SWPPPs) and Monitoring Plans under the NPDES permitting program. These facilities may be required to obtain a separate NPDES storm water permit, have their storm water discharges included in an industrial wastewater discharge permit, or submit a Notice of Intent (NOI) to comply with a state general permit for storm water discharges associated with industrial activity. The local permitting agency or EPA regional office will administer the permitting process. A permit holder will typically be required to develop a SWPPP as part of the permitting process. The SWPPP must be completed by the time the NOI is submitted. To be valid, the SWPPP must cover a required set of topics designed to result in reduced contamination of storm water runoff. The following elements are typically required in the SWPPP:

- **Source identification.** This section must, as explicitly as possible, identify all locations or activities at the facility that are potential sources of pollutants. The General Permit usually does not specify areas to be checked; instead it requires that all *industrial* areas of the facility be inspected for this identification. Non-industrial areas that need not be considered in the SWPPP include employee parking lots and office buildings. Generally, any area that is used for an industrial activity is a potential source of pollutants and must be considered.
- **Storm Water Management Controls.** This section outlines methods the facility will employ to reduce overall pollutant loads in storm water. Such methods are referred to as Best Management Practices (BMPs). The regional authority usually does not specify required practices but instead encourages facilities to design and implement management controls appropriate for that site. The regional authority may be able to offer assistance in developing BMPs that will be effective at this facility. Management controls described in the SWPPP must then continue to be implemented to maintain compliance with the permit.
- **Certification.** This section is a legally binding certification that the facility has eliminated any potential discharges of non-storm water to the storm water conveyance system. Non-storm water discharges are any discharges other than storm water that flow into a storm water conveyance system. In some older facilities, process water pipes were interconnected with storm water drains. These are now considered "illicit" connections and are illegal under the NPDES storm water regulatory program. The certification must state that the facility has been fully examined and that no illicit connections to the storm water system have been found, or if such connections have been found, that they have been corrected.

## **EPA Facility Response Plan (40 CFR 112.20)**

### **Applicability Criteria**

A Facility Response Plan, including training programs and drills/exercises, is required of any shipyard that has the potential to cause substantial harm from a discharge of oil or oil-containing liquids. A shipyard is categorized as a "substantial harm" facility if it meets any one of the following criteria:

	<b>Criteria</b>	<b>Check All That Apply</b>
1.	The shipyard transfers oil over water to or from vessels, and the shipyard has a total oil storage capacity greater than or equal to 42,000 gallons.	
2.	The shipyard has a total oil storage capacity greater than or equal to one million gallons and the shipyard lacks adequate secondary containment.	
3.	The shipyard has a total oil storage capacity greater than or equal to one million gallons, and the shipyard is located at a distance such that a discharge from the shipyard could cause injury to sensitive environments.	
4.	The shipyard has a total oil storage capacity greater than or equal to one million gallons, and the shipyard is located at a distance such that a discharge from the shipyard would shut down a public drinking water intake.	
5.	The shipyard has a total oil storage capacity greater than or equal to one million gallons, and the shipyard has experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years.	
6.	The shipyard has been notified by the EPA Regional Administrator that the facility is a "substantial harm" facility after consideration of site-specific characteristics.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

- Oil-containing liquid is interpreted differently by various EPA regions. Check with your local EPA region to determine the quantity of oil in the liquid that triggers the requirement. Examples may include bilge water, oil-based paints, and cutting fluids.
- Vessels include any water craft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.
- Adequate secondary containment means the containment is sufficiently large to accommodate the capacity of the largest aboveground oil storage tank, plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area.
- The distance from the shipyard that could be impacted by a discharge is an estimate of the distance the oil could travel on the water in 15 hours for designated port areas and 27 hours for all other water bodies. Calculation methods are specified in the regulations.
- Sensitive environments include areas such as wetlands, national and state parks, critical habitats, wildlife areas, historical sites, and bird nesting areas.
- The facility storage capacity includes the capacity of all containers such as tanks, transformers, drums, and 5-gallon buckets. Empty containers intended for oil but not permanently removed from service are included. The total capacity of the container is included in the facility storage capacity, whether the container is used for oil or oil mixtures.

### **Regulatory Requirements**

The owner or operator of onshore non-transportation-related facilities engaged in drilling, producing, refining, transferring, distributing, or consuming oil and oil products that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters is required to prepare an oil spill response plan.

Criteria 1 under the subsection titled Applicability Criteria only applies to transfers of oil between the shipyard and non-public vessels. If the shipyard only transfers oil to public vessels, criteria 1 would not apply. This does not mean that one of the remaining 5 criteria might not apply to the shipyard.

## **Oil Spill Response Plan (49 CFR 130)**

Applicability criteria that apply to oil spill response plans are given in the table that follows. The regulatory requirements that apply to 49 CFR 130 follow the tables.

### **Applicability Criteria**

An Oil Spill Response Plan, in addition to complying with communication and packaging requirements, is required when a shipyard owns or operates motor vehicles or railroad cars for the transport of oil or oil mixtures in interstate or intrastate commerce and the transport mode meets either one of the criteria in the table that follows the next paragraph.

Communication and packaging requirements must be met when a shipyard arranges to transport oil or oil mixtures in interstate or intrastate commerce by motor vehicle or railroad car and the transportation mode meets either one of the following criteria:

	<b>Criteria</b>	<b>Check All That Apply</b>
1.	Liquid petroleum oil is transported in a packaging having a capacity of at least 3,500 gallons.	
2.	Liquid petroleum or non-petroleum oil is transported in a packaging in a quantity greater than 42,000 gallons.	

- Oil mixtures are defined as mixtures containing at least 10 percent oil by weight.
- Oil transport exclusively within the confines of the shipyard does not constitute transport in interstate or intrastate commerce.
- Petroleum oil carried in a fuel tank of a transportation vehicle for use in propelling the vehicle does not constitute transport in interstate or intrastate commerce.

### **Regulatory Requirements**

The regulations that follow prescribe the prevention, containment, and response planning requirements of the Department of Transportation

applicable to transportation of oil by motor vehicles and rolling stock. Specifically, these regulations apply to any facilities that use tank trucks or rail cars to transport petroleum oil in packages of 3,500 gallons or more, or non-petroleum oil in quantities of 42,000 gallons or more per packaging into or out of a shipyard. The DOT has jurisdiction over non-marine transportation-related pipelines, motor vehicles, and rolling stock. Facilities to which these regulations apply must comply with the following requirements:

- **Communication Requirements (49 CFR 130.11).** Persons offering oil for transportation must provide the transporter with a document that indicates the shipment contains oil.
- **Packaging Requirements (49 CFR 130.21).** Packaging used for the transportation of oil must be designed, constructed, and managed in such a manner to prevent the release of oil to the environment.
- **Response Plan (49 CFR 130.31).** The response plan must address the personnel and equipment available to respond to a discharge, be consistent with the requirements of the National Contingency Plan and the Area Contingency Plans, and describe the training, drills, and equipment testing to be carried out ensure the safety of the facility and to mitigate or prevent the discharge.

## Oil Pipeline Response Plan (49 CFR 194)

### Applicability Criteria

An Oil Pipeline Response Plan (49 CFR 194) is required when a shipyard owns or operates one or more pipelines for the transport of oil or oil mixtures to or from the site and the pipeline meets any one of the following criteria:

	Criteria	Check All That Apply
1.	The pipeline is greater than 6 <sup>-5</sup> / <sub>8</sub> inches in diameter, longer than 10 miles, and could adversely affect navigable waters within 12 hours after the start of a discharge.	
2.	The pipeline is greater than 6 <sup>-5</sup> / <sub>8</sub> inches in diameter, longer than 10 miles, and could adversely affect public drinking water intakes within 12 hours after the start of a discharge.	
3.	The pipeline is greater than 6 <sup>-5</sup> / <sub>8</sub> inches in diameter, longer than 10 miles, and could adversely affect environmentally sensitive areas within 12 hours after the start of a discharge.	
4.	The pipeline is 6 <sup>-5</sup> / <sub>8</sub> inches in diameter or less, shorter than 10 miles, and could adversely affect navigable waters within 4 hours after the start of a discharge.	
5.	The pipeline is 6 <sup>-5</sup> / <sub>8</sub> inches in diameter or less, shorter than 10 miles, and could adversely affect public drinking water intakes within 4 hours after the start of a discharge.	
6.	The pipeline is 6 <sup>-5</sup> / <sub>8</sub> inches in diameter or less, shorter than 10 miles, and could adversely affect environmentally sensitive areas within 4 hours after the start of a discharge.	
7.	The pipeline is 6 <sup>-5</sup> / <sub>8</sub> inches in diameter or less, shorter than 10 miles, and has had a release of more than 42,000 gallons within the last five years.	
8.	The pipeline is 6 <sup>-5</sup> / <sub>8</sub> inches in diameter or less, shorter than 10 miles, and has experienced two or more reportable pipeline releases within the last five years.	

9.	The pipeline is 6- <sup>5</sup> / <sub>8</sub> inches in diameter or less, shorter than 10 miles, and the pipeline contains electric resistance welded pipe, manufactured prior to 1970, that operates with a maximum operating pressure corresponding to a stress level above 50% of the pipe's minimum yield strength.	
10.	The pipeline is 6- <sup>5</sup> / <sub>8</sub> inches in diameter or less and longer than 10 miles.	
11.	The pipeline is greater than 6- <sup>5</sup> / <sub>8</sub> inches in diameter and shorter than 10 miles.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.
- Oil mixtures are interpreted to mean mixtures containing at least 10% oil by weight.
- DOT generally follows the Coast Guard and EPA's definition of "environmentally sensitive areas."

### **Regulatory Requirements**

An oil pipeline that could cause significant harm to the environment by discharging oil to navigable waters may be required to develop and implement a pipeline Oil Spill Response Plan as described under 49 CFR 194 Appendix A. The plan must present a "worst case" spill scenario and provide details on the methodology used to determine the scenario. The plan must also be organized into a core plan which addresses spill response operations that apply to the pipeline in general and appendices which present specific information for special response zones associated with the pipeline.

The requirements apply equally to public and private shipyards.

## USCG Requirements for Facilities Transferring Oil in Bulk (33 CFR 154)

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Applicability criteria that apply to facilities transferring oil in bulk are given in the three tables that follow. The regulatory requirements that apply to 33 CFR 154 follow the tables.

### Applicability Criteria

**Operations Manual.** An Operations Manual, operating rules, administrative provisions, and equipment requirements (33 CFR 154) are required when a shipyard meets any one of the following criteria:

	Criteria	Check All That Apply
1.	The shipyard is capable of transferring oil or hazardous materials in bulk to or from fixed onshore facilities to or from a vessel that has a total capacity of 10,500 gallons or more for all bulk products carried.	
2.	The shipyard is capable of transferring oil or hazardous materials in bulk to or from mobile onshore facilities to or from a vessel that has a total capacity of 10,500 gallons or more for all bulk products carried.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil is interpreted to mean liquids containing oil in any amount. Examples may include bilge water, oil-based paints, and cutting fluids.
- Hazardous materials are any of the substances, other than oil or liquefied gases, under 46 CFR 153.40(a), (b), (c), and (e).
- Vessels include any water craft or other artificial contrivance used or capable of being used as a means of transportation on water, other than a public vessel.
- Mobile facilities are defined as facilities that can readily change location, such as a tank truck or tank car, other than a vessel or a public vessel. Public vessels are vessels owned or chartered and operated by the United States Government or the government of a

foreign country, and the vessel is not engaged in commercial service.

- Facility means either an onshore or offshore facility, except for an offshore facility operating under the jurisdiction of the Secretary of the Department of Interior, and includes, but is not limited to, structures, equipment, and appurtenances thereto, used or capable of being used to transfer oil or hazardous materials to or from a vessel or public vessel. Also included are facilities that tank clean or strip and any floating structure that is used to support an integral part of the facility's operation. A facility includes federal, state, municipal, and private facilities.
- Transfer is defined as any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement. A transfer is considered to begin when the persons in charge of the receiving facility and vessel first meet to begin completing the declaration of inspection as required by 33 CFR 156.150. A transfer is considered to be complete when all the connections for the transfer have been uncoupled and secured with blanks or other closure devices, and both of the persons in charge have completed the declaration of inspection to include the date and time the transfer was complete.

**Vapor Control Systems.** Operating rules, administrative provisions, and equipment requirements for vapor control systems (33 CFR 154) are required when a shipyard meets any one of the following criteria:

	Criteria	Check All That Apply
1.	The shipyard collects vapors of crude oil, gasoline blends, or benzene emitted from vessel cargo tanks.	
2.	The shipyard owns or operates a vessel that is not a tank vessel that has a vapor processing unit located on board for recovery, destruction, or dispersion of crude oil, gasoline blends, or benzene vapors emitted from a tank vessel.	
3.	The shipyard is a certifying entity, which reviews, inspects, tests, and/or certifies facility vapor control systems.	
4.	The shipyard collects vapors of flammable or combustible cargoes other than crude oil, gasoline blends, or benzene.	

- Vapor control systems are not required by the USCG; various states may require such systems as part of their air pollution control

regulations. The design, installation, and operation of marine vapor control systems are within the jurisdiction of the USCG.

- Vessels include any water craft or other artificial contrivance used or capable of being used as a means of transportation on water, other than a public vessel.

**Facility Response Plan.** A Facility Response Plan, including inspection and maintenance programs for response resources (33 CFR 154), is required when a shipyard meets any one of the following criteria:

	Criteria	Check All That Apply
1.	The shipyard transfers oil in bulk to or from a vessel that has a capacity of 10,500 gallons or more from fixed onshore facilities.	
2.	The shipyard transfers oil in bulk to or from a vessel that has a capacity of 10,500 gallons or more from mobile onshore facilities.	
3.	The shipyard has been designated a substantial harm facility by the USCG Captain of the Port.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.
- Oil is interpreted to mean liquids containing oil in any amount.
- Vessels include any water craft or other artificial contrivance used or capable of being used as a means of transportation on water, other than a public vessel.
- Mobile facilities are defined as any facility that can readily change location, such as a tank truck or tank car, other than a vessel or a public vessel. Public vessels are vessels owned or chartered and operated by the United States Government or the government of a foreign country, and the vessel is not engaged in commercial service.
- Transfer is defined as any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement. A transfer is considered to begin when the person in charge of the receiving facility and vessel first meet to begin completing the declaration of inspection as required by 33 CFR 156.150. A transfer is considered to be complete when all the connections for the transfer have been uncoupled and secured with blanks or other closure

devices and both of the persons in charge have completed the declaration of inspection to include the date and time the transfer was complete.

### **Regulatory Requirements**

This regulation presents the United States Coast Guard requirements for public and private shipyards transferring oil in bulk. It applies to:

- Facilities capable of transferring oil or hazardous materials to a vessel capable of holding 250 barrels or more;
- Facilities capable of transferring oil or hazardous substances to a vessel holding less than 250 barrels if the process is capable of significant harm to the environment by discharging oil; and
- Marine transportation-related (MTR) facilities capable of causing significant harm to the environment by discharging oil.

These requirements are designed to reduce the possibility and potential consequences of an oil spill into coastal navigable waters by facilities as described above. Depending on the characteristics of the facility, one or more of the following may be required under 33 CFR 154:

- **Operations Manual (33 CFR 154.300 et seq.).** This operations manual describes oil storage and transfer operations at the facility. The manual must include general facility information (geographic location, size, facilities, etc.), about the oil or other substances handled, personnel responsibilities, and a summary of the federal, state and local regulations that apply to the facility.
- **Specific equipment requirements (33 CFR 154.500 et seq.).** Specific requirements apply to hose assemblies, closure devices, monitoring devices, discharge removal and containment equipment, emergency shutdown, communications, and lighting.
- **General facility operations requirements (33 CFR 154.700 et seq.).** This section describes personnel designations, safety requirements, and record-keeping requirements;
- **Vapor control system (33 CFR 154.800 et seq.).** Vapor control systems associated with the facilities must meet certain specifications.
- **Oil Spill Response Plan (33 CFR 154.1010 et seq.).** MTR facilities are required to develop a response plan to prepare for and respond to an oil spill. Additional response plan requirements apply to Trans

Alaska Pipeline Authorization Act (TAPAA) facilities operating in  
Prince William Sound, Alaska.

## USCG Requirements for Oil Transfer Operations (33 CFR 156)

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### Applicability Criteria

Administrative and operating requirements (33 CFR 156) are required when a shipyard meets the following criterion:

	Criteria	Check If Applicable
1.	The shipyard transfers oil or hazardous materials on navigable waters to, from, or within a vessel that has a capacity of 10,500 gallons or more, except for transfer operations within public vessels.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.
- Hazardous materials are any of the substances, other than oil or liquefied gases, under 46 CFR 153.40(a), (b), (c), and (e). Oil is interpreted to mean liquids containing oil in any amount. Examples may include bilge water, oil-based paints, and cutting fluids.
- Vessels include any water craft or other artificial contrivance used or capable of being used as a means of transportation on water, other than a public vessel.
- Public vessels are vessels owned or chartered and operated by the United States Government or the government of a foreign country, and the vessel is not engaged in commercial service.
- Transfer is defined as any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement. A transfer is considered to begin when the persons in charge of the receiving facility and vessel first meet to begin completing the declaration of inspection as required by 33 CFR 156.150. A transfer is considered to be complete when all the connections for the transfer have been uncoupled and secured with blanks or other closure devices and both of the persons in charge have completed the declaration of inspection to include the date and time the transfer was complete.

## **Regulatory Requirements**

Facilities capable of transferring oil or hazardous materials to a vessel capable of holding 250 barrels or more may be subject to the oil transfer requirements in 33 CFR 156. These regulations provide specific requirements for oil transfer operations, including lightering operations. The requirements address advance notice of oil transfers, precautions and equipment used during transfer operations, discharge cleanup, and equipment testing and inspections. Excluded from these regulations are transfer operations occurring within public vessels.

## Oil Pollution Prevention Regulations for Vessels (33 CFR 155)

### Applicability Criteria

Administrative and operating requirements (33 CFR 155) are needed when a shipyard owns or operates a vessel that meets the following criterion:

	Criteria	Check If Applicable
1.	The vessel is operated under the authority of the United States or other country, except for warships, naval auxiliary ships, or other government-owned/operated ships when not engaged in commercial service, or any other ship excluded by MARPOL 73/78.	

- Vessels include any water craft or other artificial contrivance used or capable of being used as a means of transportation on water, other than a public vessel.
- Public vessels are vessels owned or chartered and operated by the United States Government or the government of a foreign country, and the vessel is not engaged in commercial service.

A Vessel Response Plan, including inspection and maintenance programs for response resources (33 CFR 155), is required when a shipyard owns or operates a vessel that meets the following criterion:

	Criteria	Check If Applicable
1.	The vessel is constructed or adapted to carry, and is carrying, oil in bulk as cargo or cargo residue and is a vessel of the United States, operates on navigable waters of the United States, or transfers oil in an area within the United States jurisdiction.	

- Oil means oil of any kind or in any form, including but not limited to petroleum fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.
- Vessels include any water craft or other artificial contrivance used or capable of being used as a means of transportation on water,

other than a public vessel. In addition, certain offshore supply fishing, and fishing tender vessels under 750 gross tons are excluded from these requirements.

- Public vessels are vessels owned or chartered and operated by the United States Government or the government of a foreign country, and the vessel is not engaged in commercial service.

### **Regulatory Requirements**

This regulation presents the United States Coast Guard Oil Pollution Prevention Regulations for vessels transporting oil. It applies to all vessels (except public vessels) under the jurisdiction of U.S. authority and vessels in waters of the U.S. or in U.S. ports. Such vessels must adhere to certain requirements for transportation of oil. The following requirements may apply:

- **Vessel Equipment (33 CFR 155.200 et seq.).** Specific equipment requirements addressing spill removal equipment, towing capability, spill containment, ballast and bilge water containment and discharge, placarding, and overfill devices apply to vessels transporting oil.
- **Transfer Personnel, Procedures, Equipment, and Records (33 CFR 155.700 et seq.).** Vessels transporting oil must develop transfer procedures which include establishing personnel responsibilities, emergency shutdown, communications, deck lighting, hose specifications, closure device requirements, tank vessel security, and record keeping.
- **Vessel Oil Spill Response Plan (33 CFR 155.1010 et seq.).** The requirements of the response plan required for a vessel depend on whether the vessel is manned or unmanned, carrying oil as a primary or secondary cargo, and the type of petroleum carried (Group I, II, III, IV, or V). Differing spill response plan requirements apply to Trans Alaska Pipeline Authorization Act (TAPAA) facilities operating in Prince William Sound, Alaska, and vessels carrying animal fats and vegetable oils as the primary cargo.

## SECTION C

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### ACTIVITIES/FACILITIES TABLE

Following is a table describing the oil and petroleum-related activities that take place in a shipyard and the types of facilities used in oil and petroleum-related activities. These descriptions are designed to indicate the range of activities that can take place and types of facilities involved, although most yards only have a subset of these activities or facilities.

To simplify the identification of the activities that occur in a shipyard, and the types of facilities involved, the table has been divided into general categories. Within each category are the detailed activities and facilities related to oil and petroleum. Each detailed activity or facility is indicated with a bullet, and a cross-reference for use with the matrices in Section D is provided. The category titles are shaded.

Activities and facility descriptions identified with a "--" are not subject to applicable CWA and OPA 90 regulations. Although the storage of hazardous materials on docks is not regulated by CWA and OPA 90 regulations unless the facility is a MTR facility, storage is usually not allowed under other regulations, even when the facility is not a MTR facility. Check with other regulations to determine the appropriate requirements.

#### Agency Jurisdiction

The distinction as to which agency has jurisdiction over the various aspects of a shipyard is complex and often confusing. To aid in the determination of which agency's regulations apply, excerpts from 40 CFR 112 Appendix A were reviewed to help determine the jurisdiction of the EPA, DOT, and the USCG.

#### EPA

The EPA-regulated portion of a facility is referred to as the "non-transportation-related" facility. The portion of the definition that applies to shipyards includes the following:

- Oil storage facilities, including all equipment and appurtenances related thereto, as well as fixed bulk plant storage, terminal oil storage facilities, consumer storage, pumps, and drainage systems used in the storage of oil;
- Oil storage facilities, including all equipment and appurtenances related thereto, as well as fixed bulk plant storage, terminal oil storage facilities, consumer storage, pumps, and drainage systems used in the storage of oil, but excluding inline or breakout storage tanks needed for the continuous operation of a pipeline system and any terminal facility, unit, or process integrally associated with the handling or transferring of oil in bulk to or from a vessel;
- Industrial, commercial, agricultural, or public facilities which use and store oil, excluding any terminal facility, unit, or process integrally associated with the handling or transferring of oil in bulk to or from a vessel;
- Waste treatment facilities, including in-plant pipelines, effluent discharge lines, and storage tanks, but excluding waste treatment facilities located on vessels and terminal storage tanks and appurtenances for the reception of oily ballast water or tank washing from vessels and associated systems used for off-loading vessels;
- Loading racks, transfer hoses, loading arms, and other equipment which are appurtenant to a non-transportation-related facility or terminal facility and which are used to transfer oil in bulk to or from highway vehicles or railroad cars;
- Highway vehicles and railroad cars which are used for the transport of oil exclusively within the confines of a non-transportation-related facility and which are not intended to transport oil in interstate or intrastate commerce; and
- Pipeline systems which are used for the transport of oil exclusively within the confines of a non-transportation-related facility or terminal facility and which are not intended to transport oil in interstate or intrastate commerce, but excluding pipeline systems used to transfer oil in bulk to or from a vessel.

### USCG

The USCG regulates "transportation-related facilities," defined as:

- Onshore and offshore terminal facilities, including transfer hoses, loading arms, and other equipment and appurtenances used for the purpose of handling or transferring oil in bulk to or from a vessel, as well as storage tanks and appurtenances for the reception of oily ballast water or tank washing from vessels, but excluding terminal waste treatment facilities and terminal storage facilities;
- Transfer hoses, loading arms, and other equipment appurtenant to a non-transportation-related facility which are used to transfer oil in bulk to or from a vessel;

## DOT

The DOT regulates the following “transportation-related” facilities:

- Interstate and intrastate onshore and offshore pipeline systems, including pumps and appurtenances related thereto, as well as in-line or breakout storage tanks needed for the continuous operation of a pipeline system and pipelines from onshore and offshore oil production facilities. Excluded are onshore and offshore piping from wellheads to oil separators and pipelines which are used for the transport of oil exclusively within the confines of a non-transportation-related facility or terminal facility and which are not intended to transport oil in interstate or intrastate commerce or to transfer oil in bulk to or from a vessel.

In addition to the definitions provided above, a rule of thumb used by the agencies helps to determine the point at which the agency jurisdiction changes. This point is the first valve inside the secondary containment for the bulk storage tank(s). For example, DOT has jurisdiction over pipelines entering the property until the point at which they connect to the first valve inside secondary containment. The EPA assumes responsibility at that point until the oil is transferred through the first valve inside secondary containment to the piping that ultimately connects to a vessel. The USCG assumes responsibility at this point. The distinction is not always clear because some storage tanks do not have secondary containment within a shipyard. In cases such as these, the agencies involved should be consulted for their interpretation.

<b>ACTIVITIES AND FACILITIES TABLE</b>	
<b>Rail Cars and Tanker Trucks</b>	
<p>DOT-related operations are operations that are generally related to commercial transport of oil by rail car, tanker trucks, or pipeline originating within or going to locations outside the boundaries of the shipyard. Typical activities would be the delivery of oil and petroleum products to the yard. Also regulated are pipelines within shipyard boundaries.</p>	
<ul style="list-style-type: none"> <li>The length of oil or petroleum pipelines between the point they enter the property until they reach the first valve inside secondary containment</li> </ul>	L-1
<ul style="list-style-type: none"> <li>Pipelines located entirely within the property boundary that are not used for the transfer of oil/petroleum to vessels</li> </ul>	L-2
<ul style="list-style-type: none"> <li>Rail cars and tankers entering the property to deliver oil/petroleum products (prior to connecting to the loading rack)</li> </ul>	L-3
<ul style="list-style-type: none"> <li>Rail cars and tankers leaving the property containing oil/petroleum products or wastes after disconnecting from the loading rack</li> </ul>	L-4
<ul style="list-style-type: none"> <li>The connection to site hoses/pipes and the subsequent transfer of oil/petroleum products from rail cars and tanker trucks to on-site storage</li> </ul>	L-5
<ul style="list-style-type: none"> <li>After the transfer of oil/petroleum products and wastes to rail cars and tankers has been completed, the operations of those vehicles on the property prior to exiting</li> </ul>	L-6
<b>Onshore Non-transportation-related Activities</b>	
<p>Onshore non-transportation-related activities are land-based operations related to shipyard activities that do not involve transfer or use of materials over water and are not related to such operations. These activities include major shipyard operations related to dry-land shipbuilding and repair (including painting, fueling of equipment, and storage of oil and petroleum products) and other support operations (including wastewater treatment, within shipyard transportation, and transfers). These would also include activities taking place in a ways or graving dock or on a marine railway where the activity did not take place over water ("dry land" operations).</p>	

• Storage of oil/petroleum products and wastes in containers and tanks (aboveground and underground tanks), including permanent and portable tanks	L-7
• Storage of oil/petroleum products (including hydraulic reservoirs) in tanks on cranes, compressors, generators, fire pumps, and other similar equipment	L-8
• Oil-filled transformers and switchgear	L-9
• Oil/water separators	L-10
• Pipelines within the shipyard that transfer oil/petroleum products and wastes within the yard	L-11
• Tanker trucks moving and transferring oil/petroleum products and wastes to and from land storage within the confines of the shipyard	L-12
• Wastewater treatment plants treating oily wastewater generated in the yard	L-13
• Fueling of shipyard vehicles and equipment by tanker trucks operating within the shipyard	L-14
• Fueling vehicles from a fixed fueling facility	L-15
• Drums used for dispensing oil/petroleum products for use in the yard	L-16
• Offloading of oil/petroleum containerized products and wastes from and/or loading to a vessel located in a dry ways or graving dock or to a vessel located on a marine railway above the high tide line.	W-1
<b>MARINE TRANSPORTATION-RELATED FACILITIES</b>	
Marine transportation-related facilities include structures and equipment used or capable of being used in the bulk transfer of oil or hazardous materials to or from a vessel. Examples of fixed facilities include pipelines and hoses leading from the first valve inside secondary containment to the manifold connecting to vessels (typically located on a pier). Mobile facilities include tanker trucks delivering fuel or lube oil to a vessel.	

Activities Occurring in Floating Dry Dock	
<p>Many shipyard construction and repair activities take place within a floating dry dock. In many ways, the shipyard activities that take place on a dry dock are equivalent to those that take place on land, except that the dry dock itself is on water. Listed below is a range of activities involving oil and petroleum that typically are found in a dry dock.</p>	
• Storage and transfer of oil and petroleum products within the vessel located on the dry dock (not leaving the vessel)	W-2
• Permanent tanks located within dry dock (wing walls for containing bilge water or fuel transferred from the vessel in dry dock)	W-3
• Tanks on permanent equipment (such as marine cranes) within the dry dock	W-4
• Portable tanks located on dry dock, including tanks supporting portable boilers, generators, compressors, etc.	W-5
• Tanker trucks transferring oil to tanks or vehicles located on the dry dock	W-6
• Offloading oil/petroleum or bilge water from vessel to tanks located on the dry dock	W-7
• Storage of oil/petroleum products and wastes used for vessel repair and maintenance in containers and tanks on the dry dock	W-8
• Hydraulic and fuel tanks on mobile cranes	W-9
• Oil-filled transformers and switchgear on the dry dock	W-10
• Oil/water separators on the dry dock treating materials transferred directly from the vessel	W-11
• Oil/water separators on the dry dock <u>not</u> treating materials coming directly from the vessel	W-12
• Transfer of oil, fuel, or bilge water from wing walls in dry dock to a barge <u>not</u> owned or operated by the shipyard	W-13
• Transfer of oil, fuel, or bilge water from wing walls in dry dock to a barge owned or operated by the shipyard	W-14

<b>Activities Occurring Onshore (includes pumps, pipes, hoses) Associated with Vessel Operations Where the Transfer to these Items Took Place or Is Anticipated to Take Place over Water</b>	
<p>These activities involve the oil and petroleum operations related to onshore support where the transfer or proposed transfer of oil/petroleum materials will take place over water (to a vessel docked at a facility, in a graving dock before water removal, or in a marine railway). These are staging operations involving "temporary" storage on docks either prior to, or immediately after, over-water transfer.</p>	
<ul style="list-style-type: none"> <li>Containers of oil/petroleum products and wastes awaiting loading to vessels or awaiting transport to yard storage after unloading from vessels</li> </ul>	W-15
<ul style="list-style-type: none"> <li>Onshore oil/water separators handling material originating aboard vessels. (The material is first stored in a tank before being piped to the oil/water separator.)</li> </ul>	W-16
<ul style="list-style-type: none"> <li>Dockside hazardous waste storage (paints, oils) for materials generated on ship prior to transport to shipyard accumulation areas</li> </ul>	W-17
<ul style="list-style-type: none"> <li>Dockside paint storage for paints to be transferred to ships</li> </ul>	W-18
<b>Activities Occurring over Water</b>	
<p>Many of the activities within a shipyard involve over-water transfer. These may include transfers between any of the following: pier and vessel, dry dock to vessel, and dock to marine railways.</p>	
<ul style="list-style-type: none"> <li>Bulk transfer of oil, bilge water, fuel, lubricating oil, and tank-cleaning wastes to permanent and temporary tanks (from or to a vessel)</li> </ul>	W-19
<ul style="list-style-type: none"> <li>Bulk transfer operations over water to or from barges when the barge <u>is</u> owned or operated by the shipyard (e.g., fueling and tank cleaning)</li> </ul>	W-20
<ul style="list-style-type: none"> <li>Fueling crane barges from shore</li> </ul>	W-21
<ul style="list-style-type: none"> <li>Fuel trucks (driving trucks onto and off the dry dock) that <u>are not</u> involved in fueling a vessel</li> </ul>	L-17 <sup>1</sup>
<ul style="list-style-type: none"> <li>Fuel trucks (driving trucks onto and off the dry dock) that <u>are</u> used to fuel a vessel</li> </ul>	W-22
<ul style="list-style-type: none"> <li>Bulk transfer of bilge water, tank-cleaning wastes, or fuel from vessels to shore facilities over water</li> </ul>	W-23

<sup>1</sup> Fuel trucks are regulated only before they drive onto the dry dock.

<ul style="list-style-type: none"> <li>• Bulk transfer of oil/petroleum to vessel over water from onshore facilities</li> </ul>	W-24
<ul style="list-style-type: none"> <li>• Shipyard owned/operated hoses used in bulk transfer operations that connect the vessel to the hard piping leading from dry dock, ways, or graving dock to the first valve inside secondary containment inside the wastewater treatment plant</li> </ul>	W-25
<ul style="list-style-type: none"> <li>• Transfer of containers of paints/lubricants/oil to or from a vessel over water</li> </ul>	W-26
<b>Tank Vessels</b>	
<p>Tank vessels in this category include manned and unmanned vessels (barges) that carry oil/petroleum to or from the shipyard. These operations usually involve either fueling or de-fueling of vessels or transfer of oily bilge water from the vessel to the barge. In many circumstances, the vessels will not be owned or operated by the shipyard but will be under contract or control of a shipyard contractor.</p>	
<ul style="list-style-type: none"> <li>• Tank vessels that transport oil/petroleum products or wastes to or from the shipyard</li> </ul>	W-27

## SECTION D

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# ACTIVITIES/REGULATIONS MATRICES

From the Activities/Facilities Table in Section C, we selected those activities and facilities that are regulated under CWA or OPA 90. We then compared these activities to the applicable regulations identified in Section B to determine which regulation would apply to each activity. The results of this comparison are presented in two matrix formats for easy usage: one for activities conducted over land and one for activities conducted on or over water.

In both matrices, the oil or petroleum-related activity is described in the second column. The first column contains a cross-reference to the Activities/Facilities Table to facilitate easy identification of a particular activity on the matrices. The letter "L" refers to a land-based activity, while "W" refers to transfers over water and activities occurring on the water. The number following L or W provides a specific identifier for each activity listed in the Activities/Facilities Table.

The Activities Conducted Over Land matrix identifies only those applicable regulations from CWA and OPA 90 that pertain to land-based activities. Each regulation is identified in a separate column heading. Likewise, the Activities Conducted On or Over Water matrix identifies only those applicable regulations pertaining to transfers conducted over water and activities occurring on the water.

To determine which regulation applies to a given activity, find the activity in the second column and read across to see which regulations are identified as applicable or possibly applicable. Letter codes will prompt you to also consider whether the shipyard or the contractor/operator has the responsibility for complying with that regulation (see the legend for each matrix).

For activities that are not specifically regulated under CWA or OPA 90, a "--" will be shown.

### Activities Conducted On or Over Water

No.	Activity Description	MTR Operations Manual (33 CFR 154)	MTR Spill Response Plan (33 CFR 154)	MTR Equipment Requirements (33 CFR 154)	MTR General Operations Reqs (33 CFR 154)	MTR Vapor Control System (33 CFR 154)	Over-water Oil Transfers (33 CFR 156)	Vessel Oil Spill Response Plan (33 CFR 155)	Vessel Transfer Operation Requirements (33 CFR 155)	Oil Equipment Requirements (33 CFR 155)
<b>Activities Occurring in Floating Dry Dock</b>										
W-1	Offloading of oil/petroleum containerized products and wastes from and/or loading to a vessel located in a dry ways or graving dock or to a vessel located on a marine railway above the high tide line.	--	--	--	M	--	--	--	--	--
W-2	Storage and transfer of oil and petroleum products within the vessel located on the drydock (not leaving the vessel).	--	--	--	--	--	V	V	V	V
W-3	Permanent tanks located within dry dock (wing walls for containing bilge water or fuel transferred from the vessel in dry dock)	O	O	O	O	X	O, V	V	V	V
W-4	Tanks on permanent equipment (such as marine cranes) within the dry dock	--	--	--	M	--	--	--	--	--
W-5	Portable tanks located on dry dock, including tanks supporting portable boilers, generators, compressors, etc.	--	--	--	M	--	--	--	--	--
W-6	Tanker trucks transferring oil to tanks or vehicles located on the dry dock	--	--	--	M	--	--	--	--	--
W-7	Offloading oil/petroleum or bilge water from vessel to tanks located on the dry dock	O	O	O	O	X	O, V	V	V	V
W-8	Storage of oil/petroleum products and wastes used for vessel repair and maintenance in containers and tanks on the dry dock	--	--	--	M	--	--	--	--	--
W-9	Hydraulic and fuel tanks on mobile cranes	--	--	--	M	--	--	--	--	--
W-10	Oil-filled transformers and switchgear on the dry dock	--	--	--	M	--	--	--	--	--
W-11	Oil/water separators on the dry dock treating materials transferred directly from the vessel	O	O	O	O	X	O, V	V	V	V
W-12	Oil/water separators on the dry dock <u>not</u> treating materials coming directly from the vessel	--	--	--	M	--	--	--	--	--
W-13	Transfer of oil, fuel, or bilge water from wing walls in dry dock to a barge <u>not</u> owned or operated by the shipyard	O	O	O	O	X	O	--	--	--
W-14	Transfer of oil, fuel, or bilge water from wing walls in dry dock to a barge owned or operated by the shipyard	O	O	O	O	X	O, V	V	V	V

Explanation: M The safety requirements contained in MTR General Operations regulations (33 CFR 154.735) apply if the facility is an MTR, otherwise the requirement does not apply.  
O The facility owner or operator must comply with the regulation, which may or may not be the shipyard. If the facility is owned by the shipyard but operated by a contractor, the shipyard should be the responsible party.  
V The vessel owner or operator must comply with the regulation, which may or may not be the shipyard. If the vessel is owned by the shipyard but operated by a contractor, the shipyard should be the responsible party.  
X Vapor control system requirements do not apply unless a vapor control system is required by the local air district.  
-- Indicates that the regulation does not apply to the Activity or Task cited. The user is encouraged to verify applicability by using the Self-Assessment Checklist and contacting local agency representatives.

**Activities Conducted On or Over Water**

No.	Activity Description	MTR Operations Manual (33 CFR 154)	MTR Spill Response Plan (33 CFR 154)	MTR Equipment Requirements (33 CFR 154)	MTR General Operations Reqs (33 CFR 154)	MTR Vapor Control System (33 CFR 154)	Over-water Oil Transfers (33 CFR 156)	Vessel Oil Spill Response Plan (33 CFR 155)	Vessel Transfer Operation Requirements (33 CFR 155)	Oil Equipment Requirements (33 CFR 155)
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**Activities Occurring Onshore (includes pumps, pipes, hoses) Associated with Vessel Operations Where the Transfer to these Items Took Place or Is Anticipated to Take Place over Water**

W-15	Containers of oil/petroleum products and wastes awaiting loading to vessels or awaiting transport to yard storage after unloading from vessels	--	--	--	M	--	--	--	--	--
W-16	Onshore oil/water separators handling material originating aboard vessels. (The material is first stored in a tank before being piped to the oil/water separator.)	--	--	--	M	--	--	--	--	--
W-17	Dockside hazardous waste storage (paints, oils) for materials generated on ship prior to transport to shipyard accumulation areas	--	--	--	M	--	--	--	--	--
W-18	Dockside paint storage for paints to be transferred to ships	--	--	--	M	--	--	--	--	--

**Activities Occurring over Water**

W-19	Bulk transfer of oil, bilge water, fuel, lubricating oil, and tank-cleaning wastes to permanent and temporary tanks (from or to a vessel)	O	O	O	O	X	O, V	V	V	V
W-20	Bulk transfer operations over water to or from barges when the barge is owned or operated by the shipyard (e.g., fueling and tank cleaning)	O	O	O	O	X	O, V	V	V	V
W-21	Fueling crane barges from shore.	O	O	O	O	X	O, V	V	V	V
W-22	Fuel trucks (driving trucks onto and off the dry dock) that are used to fuel a vessel	O	O	O	O	X	O, V	V	V	V
W-23	Bulk transfer of bilge water, tank-cleaning wastes or fuel from vessels to shore facilities over water	O	O	O	O	X	O, V	V	V	V
W-24	Bulk transfer of oil/petroleum to vessel over water from onshore facilities	O	O	O	O	X	O, V	V	V	V
W-25	Shipyard owned/operated hoses used in bulk transfer operations that connect the vessel to the hard piping leading from dry dock, ways, or graving dock to the first valve inside secondary containment, located inside the wastewater treatment plant	O	O	O	O	X	O	--	--	--
W-26	Transfer of containers of paints/lubricants/oil to or from a vessel over water	--	--	--	M	--	--	--	--	--

**Tank Vessels**

W-27	Tank vessels that transport oil/petroleum products or wastes to or from the shipyard	--	--	--	--	--	V	V	V	V
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Explanation: M The safety requirements contained in MTR General Operations regulations (33 CFR 154.735) apply if the facility is an MTR, otherwise the requirement does not apply.  
O The facility owner or operator must comply with the regulation, which may or may not be the shipyard. If the facility is owned by the shipyard but operated by a contractor, the shipyard should be the responsible party.  
V The vessel owner or operator must comply with the regulation, which may or may not be the shipyard. If the vessel is owned by the shipyard but operated by a contractor, the shipyard should be the responsible party.  
X Vapor control system requirements do not apply unless a vapor control system is required by the local air district.  
-- Indicates that the regulation does not apply to the Activity or Task cited. The user is encouraged to verify applicability by using the Self-Assessment Checklist and contacting local agency representatives.

### Activities Conducted Over Land

No.	Activity/Facility Description	SPCC (40 CFR 112)	SWPPP (40 CFR 122; state general permit)	Oil Spill Response Plans - EPA (40 CFR 112)	DOT Oil Spill Response Plans (49 CFR 130)	DOT Communication Requirements (49 CFR 130)	DOT Packaging Requirements (49 CFR 130)	DOT Pipeline Response Plan (49 CFR 194)
<b>Rail Cars and Tanker Trucks</b>								
L-1	The length of oil or petroleum pipelines between the point they enter the property until they reach the first valve inside secondary containment	--	S	--	--	--	--	P
L-2	Pipelines located entirely within the property boundary that are not used for the transfer of oil/petroleum to vessels	S	S	S	--	--	--	--
L-3	Rail cars and tankers entering the property to deliver oil/petroleum products (prior to connecting to the loading rack)	--	S	--	T	T	T	--
L-4	Rail cars and tankers leaving the property containing oil/petroleum products or wastes after disconnecting from the loading rack	--	S	--	T	T	T	--
L-5	The connection to site hoses/pipes and the subsequent transfer of oil/petroleum products from rail cars and tanker trucks to on site storage	S	S	S	--	--	--	--
L-6	After the transfer of oil/petroleum products and wastes to rail cars and tankers has been completed, the operations of those vehicles on the property prior to exiting	--	S	--	T	T	T	--
L-7	Storage of oil/petroleum products and wastes in containers and tanks (aboveground and underground tanks), including permanent and portable tanks	S	S	S	--	--	--	--
<b>Onshore Non-transportation-related Activities</b>								
L-8	Storage of oil/petroleum products (including hydraulic reservoirs) in tanks on cranes, compressors, generators, fire pumps, and other similar equipment	S	S	S	--	--	--	--
L-9	Oil-filled transformers and switchgear	S	S	S	--	--	--	--
L-10	Oil/water separators	S	S	S	--	--	--	--
L-11	Pipelines within the shipyard that transfer oil/petroleum products and wastes within the yard	S	S	S	--	--	--	--
L-12	Tanker trucks moving and transferring oil/petroleum products and wastes to and from land storage within the confines of the shipyard	S	S	S	--	--	--	--
L-13	Wastewater treatment plants treating oily wastewater generated in the yard	S	S	S	--	--	--	--
L-14	Fueling of shipyard vehicles and equipment by tanker trucks operating within the shipyard	S	S	S	--	--	--	--

Explanation: P Indicates that the responsibility for the Pipeline Response Plan falls on the pipeline operator, which may or may not be the shipyard.  
S Indicates that the shipyard is responsible for complying with the regulatory requirements.  
T Indicates that the tank car or tank truck operator is responsible for compliance with the requirement, which may or may not be the shipyard.  
-- Indicates that the regulation does not apply to the Activity or Task cited. The user is encouraged to verify applicability by using the Self-Assessment Checklist and contacting local agency representatives.

### Activities Conducted Over Land

No.	Activity/Facility Description	SPCC (40 CFR 112)	SWPPP (40 CFR 122; state general permit)	Oil Spill Response Plans - EPA (40 CFR 112)	DOT Oil Spill Response Plans (49 CFR 130)	DOT Communication Requirements (49 CFR 130)	DOT Packaging Requirements (49 CFR 130)	DOT Pipeline Response Plan (49 CFR 194)
L-15	Fueling vehicles from a fixed fueling facility	S	S	S	--	--	--	--
L-16	Drums used for dispensing oil/petroleum products for use in the yard	S	S	S	--	--	--	--
L-17	Fuel trucks (driving trucks onto and off the dry dock) that are not involved in fueling a vessel	S	S	S	--	--	--	--

Explanation:

- P Indicates that the responsibility for the Pipeline Response Plan falls on the pipeline operator, which may or may not be the shipyard.
- S Indicates that the shipyard is responsible for complying with the regulatory requirements.
- T Indicates that the tank car or tank truck operator is responsible for compliance with the requirement, which may or may not be the shipyard.
- Indicates that the regulation does not apply to the Activity or Task cited. The user is encouraged to verify applicability by using the Self-Assessment Checklist and contacting local agency representatives.

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